



Banner
University Medical Center
Phoenix

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April 2, 2019

Salt River Project

To Whom it May Concern:

I am a Professor of Medicine at the University of Arizona College of Medicine – Phoenix where I am Chief of the Division of Medical Toxicology and Precision Medicine. I also direct the Department of Medical Toxicology at Banner – University Medical Center Phoenix, which oversees the Banner Poison and Drug Information Center, serving the greater Maricopa County area.

Salt River Project (SRP) requested that I review results of testing of well and canal water within the West Van Buren WQARF site to assess any health concerns for toxic effects resulting from exposure to water containing volatile organic chemicals (VOCs) as a result of inhalation or contact that might occur through use of water for irrigation purposes.

Based upon my review of materials and a visit to the canal cite locations, I find nothing to suggest there is any public health concern for adverse health effects resulting from exposure to VOCs for those individuals subjected to any of the exposure scenarios I considered (described below).

I reviewed the following documents provided to me by SRP:

Human Health Risk Assessment, West Van Buren WQARF Site Phoenix, Arizona, prepared by Haley & Aldrich, Inc., dated July 2014;

Public Health Exposure Assessment and Mitigation Summary Report, prepared by Synergy Environmental, dated September 16, 2011;

Health Consultation, Evaluation of Water Sampling Results in the Roosevelt Irrigation District, prepared by Arizona Department of Health Services, dated January 8, 2015; and

A summary of data in the above reports along with updated testing results from Arizona Department of Environmental Quality through 2017, titled: Volatile Organic Compound (VOC) Contaminant Levels, West Van Buren WQARF Site, dated October 14, 2018.

I also performed literature searches of typical ambient and indoor air concentrations of various VOCs in the United States.

Finally, on November 26, 2018, I visited canal and pumping station sites pertaining to the Roosevelt Irrigation District (RID) within the West Van Buren WQARF site, including sites from which the highest levels of VOCs were reported historically in air and water. Specifically, the following locations were visited:

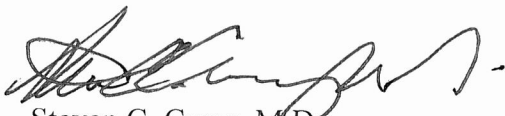
1. Open RID Main Canal along Lower Buckeye Road, immediately west of the City of Phoenix 23rd Avenue Wastewater Treatment Plant;
2. Open RID Main Canal at 43rd Avenue, the location where the RID Well #92 discharges to the RID Main Canal;
3. RID Well Site #92 on 43rd Avenue (east side of street) north of Buckeye Road;
4. Open RID Main Canal and RID Well Site #85 near Buckeye Road and 67th Avenue.
5. Open RID Main Canal west of 83rd Avenue;
6. Open section of the Salt Canal along West Van Buren (south side of the street), west of 75th Avenue; and
7. RID Well Site #114

With regard to exposure scenarios, I considered common human activities which are the most likely to result in VOC exposure – activities such as walking, running, and bicycling along the above-referenced canals or on streets adjacent to those canals. I have also considered those individuals who sit at bus stops near canals or pump stations, individuals working in businesses near canals or pump stations, and similarly situated scenarios.

As stated above, there is no public health concern for adverse health effects resulting from exposure to VOCs for those individuals subjected to any of the scenarios described, above. My lack of concern for adverse health outcomes extends both to carcinogenic and non-carcinogenic effects.

Please let me know if I can provide you with any additional information.

Sincerely,



Steven C. Curry, M.D.